

## CLAIMS

*SAC*

1. A CD player, comprising:  
a CD drive, which receives a CD and reads compressed digital audio data recorded thereon; and  
an integrated circuit chip, which decompresses the compressed data and produces a non-compressed audio output.

*Aut 11/21/00*

2. A CD player according to claim 1, wherein the data are compressed by MPEG compression.

3. A CD player according to claim 2, wherein the data are compressed by MPEG Layer-3 compression.

*2A.* A CD player according to claim 1, wherein the data are compressed at least 4-fold.

*3B.* A CD player according to claim *2A*, wherein the data are compressed at least 8-fold.

*4C.* A CD player according to claim *3B*, wherein the data are compressed approximately 12-fold.

*5D.* A CD player according to claim 1, wherein the chip includes firmware for decompressing the data.

*6E.* A CD player according to claim 1, wherein the chip comprises a custom integrated circuit chip.

*7F.* A CD player according to claim 1, wherein the chip does not comprise a general purpose processor.

*8G.* A CD player according to claim 1, wherein the CD player comprises a mobile personal audio player.

*9H.* A CD player according to claim *8G*, wherein the CD player is installed in a vehicle.

*8J.* 12. A CD recording system, comprising:

a read drive, which receives and reads a first CD having audio data recorded thereon;  
compression circuitry, which receives and compresses the audio data from the read drive; and

a write drive, which receives the compressed data and records the compressed data on a second, recordable CD.

13. A system according to claim 12, wherein the circuitry compresses the data by MPEG compression.

14. A system according to claim 13, wherein the circuitry compresses the data by MPEG Layer-3 compression.

15. A CD system according to claim 12, wherein the circuitry includes firmware for compressing the data.

16. A CD system according to claim 12, wherein the circuitry compresses the data at least 4-fold.

17. A CD system according to claim 16, wherein the circuitry compresses the data at least 8-fold.

18. A CD system according to claim 17, wherein the circuitry compresses the data approximately 12-fold.

19. A method for playing a long-playing audio CD, comprising:

reading compressed digital audio data from the CD; and

decompressing the data using a custom integrated circuit chip; and

converting the decompressed data to analog form.

20. A method according to claim 19, wherein decompressing the data comprises decompressing by MPEG decoding.

21. A method according to claim 20 wherein decompressing the data comprises decompressing by MPEG Layer-3 decoding.

22. A method according to claim 19, wherein decompressing the data comprises decompressing by at least 4-fold.

19 23. A method according to claim 22, wherein decompressing the data comprises decompressing by at least 8-fold. 18

20 24. A method according to claim 23, wherein decompressing the data comprises decompressing by approximately 12-fold. 19

21 25. A method according to claim 19, wherein reading the compressed data comprises playing the CD in a mobile personal audio player. 15

22 26. A method according to claim 19, wherein reading the compressed data comprises playing the CD in a CD player installed in a vehicle. 15

27. A method for producing a long-playing audio CD, comprising:

reading digital audio data from a prerecorded CD;  
compressing the data using MPEG compression; and  
recording the compressed data on the long-playing CD.

28. A method according to claim 27, wherein compressing the data comprises compressing by MPEG Layer-3 compression.

29. A method according to claim 27, wherein compressing the data comprises compressing by at least 4-fold.

30. A method according to claim 29, wherein compressing the data comprises compressing by at least 8-fold. 24

31. A method according to claim 30, wherein compressing the data comprises compressing by approximately 12-fold. 25

32. A method according to claim 27, wherein reading the data comprises reading data from a plurality of prerecorded CDs. 23

33. A method according to claim 32, wherein reading the data comprises inserting each of the plurality of CDs in

sequence into a read drive, in order to read data therefrom.

29 34. A method according to claim 21, wherein recording the data comprises recording data on the long-playing CD in an order that is different from the order of the data on the prerecorded CD.

23